

# UNIVERSAL ADVANCE 150 SC

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** ADVANCE 150 SC  
**Other identifier:** Indoxacarb 150 SC  
**Recommended use:** Insecticide  
**Restrictions on use:** Agriculture

**Supplier:** Universal Crop Protection (Pty) Ltd.  
**Co. Reg. No.:** 1983/008184/07  
 PO Box 801,  
 Kempton Park, 1620, South Africa  
**Telephone:** (011) 396 2233  
**Fax:** (011) 396 4666  
**Website:** [www.villacrop.co.za](http://www.villacrop.co.za)

### Emergency telephone numbers: 24 Hr Transport / Spill emergency no:

Envirosure. +27 31 205 4918  
 (Hazcall24) +27 86 044 4411  
 (Client: Villa Crop Protection)  
 Griffon Poison Information Centre +27 82 446 8946  
 (Client: Villa Crop Protection)

**Poisoning Emergency telephone numbers:**  
 Griffon Poison Information Centre +27 82 446 8946  
 Poisons Information Centre +27 861 555 777

**Villa Crop Protection Emergency number:**  
**National Safety, Health and Environmental Manager:**  
 +27 63 698 0668

## 2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
<b>Health</b>		
Oral	Acute Tox. 4	H302
Skin Sensitizer	Skin Sens. 1B	H317
Inhalation	Acute Tox. 4	H332
STOT RE	STOT RE 1	H372
<b>Environment</b>		
Aquatic acute	Aquatic acute 2	H401
Aquatic chronic	Aquatic chronic 2	H411

### The most important adverse effects:

#### Physiochemical effects:

None known.

#### Human health effects:

Harmful if inhaled.

Causes damage to organs (blood, nervous system and heart) through prolonged or repeated exposure.

#### Label elements:



**Signal word:** Danger.

#### Hazard statements:

H302: Harmful if swallowed.  
 H317: May cause an allergic skin reaction.  
 H332: Harmful if inhaled.  
 H372: Causes damage to organs (blood, nervous system and heart) through prolonged or repeated exposure.  
 H401: Toxic to aquatic life.  
 H411: Toxic to aquatic life with long lasting effects.

#### Precautionary statements:

P260: Do not breathe mist, vapours and spray.  
 P264: Wash hands and face thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.  
 P271: Use only outdoors or in a well-ventilated area.  
 P273: Avoid release to the environment.  
 P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.  
 P302/352: IF ON SKIN: Wash with plenty of water and non-abrasive soap.  
 P333/313: If skin irritation or rash occurs: Get medical advice.  
 P391: Collect spillage.  
 P501: Dispose of content/container to suitable landfill in accordance with local regulations.

#### Special labelling of certain mixtures:

None known.

#### Other hazards:

None known.

#### Toxicity:

Classification according to GHS: Cat. 4  
 Classification according to WHO: Cat. II  
 Classification according to GPIC (Active): Cat. III

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture.

#### Composition:

Chemical Name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Indoxacarb (S) - isomer	173584-44-6	14.44 %	Acute Tox. 3 (H301) Skin Sens. 1B (H317) Acute Tox. 4 (H332) STOT RE 1 (H372) Aquatic Acute 1

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			(H400) Aquatic Chronic 1 (H410)
Sodium dodecyl sulphate	151-21-3	<5 %	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)

maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.  
**Personal protective equipment:** Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear.

## 4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure and if symptoms persist, consult a doctor.

**Inhalation:** If vapours or mists have been inhaled, move victim to fresh air and remove source of contamination if safe to do so. The patient should be kept under observation. Obtain medical attention if irritation persists.

**Skin:** Remove contaminated clothing. Wash skin gently and thoroughly with cold water and non-abrasive soap. Obtain medical attention if irritation persists.

**Eyes:** Flush eyes with clean water. Lift eyelids to facilitate irritation. If present, remove contact lenses and continue rinsing. Obtain medical attention if irritation persists.

**Ingestion:** Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water and give large quantities of water to drink. Obtain medical attention if the person feels unwell.

### Anticipated acute effects:

Harmful if swallowed.

May cause an allergic skin reaction.

Harmful if inhaled.

### Anticipated delayed effects:

Causes damage to organs (blood, nervous system and heart) through prolonged or repeated exposure.

**Most important symptoms/effects:** In the case where **Indoxacarb** is ingested methemoglobinemia may occur. Can cause mild skin sensitisation with allergic rashes.

Advice to physician: There is no specific antidote available. Treat symptomatically and supportively.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used to cool unaffected stock, but avoid water coming into contact with product. Use as little water as possible.

**Unsuitable Extinguishing Media:** Water.

**Specific hazards:** In case of fire and/or explosion, do not breathe fumes.

**Special Fire Fighting Procedures:** Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid contact with skin. Ventilate area of spill or leak, especially in contained areas.

**Protective equipment:** Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

**Emergency procedures:** Alert firefighting personnel, evacuate unprotected personnel and animals.

**Environmental Precautions:** Prevent spilled product from entering sewers, waterways or ground water. This product is classified to be toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into water courses should be reported immediately to the police and the Department of Water/Environmental Affairs.

**Methods and Materials for Containment:** Contain spilled product by diking area with sand, earth or silica gel.

**Methods and Materials for Clean-up:** Cover contained spill with an inert absorbent material such as sand, earth or other appropriate non-combustible material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways.

To decontaminate the spill area, tools and equipment, wash with water and suitable detergent (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Open burning or dumping of this material is prohibited. See section 13 for disposal considerations.

## 7. HANDLING AND STORAGE

### Handling:

**Precautions for safe handling:** Harmful if swallowed. Avoid contact with skin. Ensure adequate ventilation during handling and use. Do not handle broken containers without protective equipment. Immediately clean up spills that occur during handling. Keep

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containers tightly closed when not in use. In the case of contact with the product, refer to First Aid Measures – Section 4.

**General occupational hygiene:** Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

**Storage:**

**Conditions for safe storage:** Keep out of reach of unauthorised persons, children and animals. Store in its original labelled container tightly closed, in an isolated, dry, cool and well-ventilated area. Avoid excessive heat. Avoid cross contamination with other pesticides and fertilisers.

**Incompatible substances and mixtures:** Refer to product label.

**Packaging material:** Plastic containers.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Permissible concentration:** No occupational exposure limits has been determined for the significant ingredients in this product.

**Engineering Controls:**

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

**Personal Protective Equipment:**

**Respiratory Protection:** Wear an organic cartridge respirator suitable for protection from mists/ vapours of pesticides if inhalation is likely to occur.

**Hand Protection:** Employee must wear appropriate chemically resistant gloves e.g., nitrile rubber gloves to prevent contact with this mixture.

**Eye Protection:** This product is not likely to cause eye irritation, but as a general rule it is recommended to wear a face shield when handling pesticides. This includes when handling the concentrate and when applying the product. The use of safety goggles is recommended if a face shield is not used.

**Skin and Body Protection:** The use of protective (impervious) clothing e.g. coveralls is recommended to prevent skin contact with this mixture.

**Emergency eyewash:** Where there is any possibility that an employee's eyes may be exposed to this mixture; the employer should provide an eyewash fountain or appropriate alternative within the immediate work area for emergency use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Off-white liquid.

**Odour:** Faint, unpleasant.

**pH (1% aqueous dilution):** 8.7 at 23 °C

**Melting point:** Not available.

**Freezing Point:** Not available.

**Boiling Point:** Not available.

**Flash Point:** Not flammable.

**Flammability:** Not flammable.

**Upper/lower explosion limits:** Not explosive, thermally stable.

**Vapour Pressure (mm Hg):** Not available.

**Relative Vapour Density:** Not available.

**Relative Density:** 1.074 g/ml at 21 °C

**Solubility:** Disperses in water.

**n-octanol/water partition coefficient:** Not available.

**Auto-ignition temperature:** Not available.

**Decomposition temperature:** Not available.

**Viscosity:** Not available.

### 10. STABILITY AND REACTIVITY

**Chemical Stability:** The product is stable for 2 years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50°C, preferably below 30°C, and not for prolonged periods in direct sunlight.

**Reactivity:** None known.

**Possibility of Hazardous Reactions:** None known.

**Conditions to Avoid:** Flame, fire and high temperature.

**Incompatible Materials:** Incompatible with alkaline pesticides.

**Hazardous Decomposition Products:** Nitride, chloride, carbon dioxide etc.

### 11. TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:**

**Based on experimental data.**

**Oral LD<sub>50</sub> (24 h) rat** 750 mg/kg.

**Dermal LD<sub>50</sub> (24 h) rat** > 5000 mg/kg.

**Inhalation LC<sub>50</sub> (4 h) rat** > 3.0 mg/l.

**Skin Irritation/Corrosion:** Not classified a skin irritant in rabbits.

**Eye Damage/Irritation:** Not classified a skin irritant in rabbits.

**Skin Sensitization:** May cause an allergic skin reaction.

**Respiratory Sensitization:** Not available.

**Reproductive cell mutagenicity:** Not available.

**Carcinogenicity:** Not available.

**Reproductive toxicity:** Not available.

**Specific target organ toxicity – single exposure:** Not available.

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**Specific target organ toxicity – repeated exposure:**  
 Causes damage to organs (blood, nervous system and heart) through prolonged or repeated exposure.

**Aspiration hazard:** Not available.

**Chronic Effects:** Not available.

**POTENTIAL ADVERSE EFFECTS:**

**Inhalation:** Harmful if inhaled.

**Skin contact:** Non-irritating to skin. Can cause mild skin sensitization.

**Eye contact:** Non-irritating to eyes.

**Ingestion:** Harmful if swallowed.

## 12. ECOLOGICAL INFORMATION

This product is toxic to aquatic organisms and causes long-term adverse effects in the aquatic environment.

**ECOTOXICITY DATA: Active ingredient**

**Fish:**

DPX-KN128 (S) - Rainbow trout > 0.17 mg/ℓ  
 LC<sub>50</sub> (96 h) (maximum water solubility).

DPX-MP062 (3:1 (R)-(S)) Bluegill sunfish 0.9 mg/ℓ  
 LC<sub>50</sub> (96 h) Rainbow trout 0.65 mg/ℓ

DPX-KN128 (S)- > 0.17 mg/ℓ  
**Daphnia:** (maximum water solubility).  
 EC<sub>50</sub> (48 h)

DPX-MP062 (3:1 (R)-(S)) EC<sub>50</sub> (48 h) 0.60 mg/ℓ

**Algae:**

DPX-MP062 (3:1 (R)-(S))- EC<sub>50</sub> (96 h) > 0.11 mg/ℓ

**Birds:**

DPX-MP062 (3:1 (R)-(S))- Acute oral LD<sub>50</sub> Bobwhite quail 98 mg/kg.  
 Dietary LC<sub>50</sub> (5 d) Mallard ducks > 1803 mg/kg.  
 Bobwhite quail 340 mg/kg b.w. /day.

**Bees:**

DPX-MP062 (oral) 0.26 mg/bee.  
 (3:1 (R)-(S))- (contact) 0.094 mg/bee.  
 (LD<sub>50</sub>, mg/bee)

**Worms:**

DPX-MP062 (3:1 (R)-(S))- LC<sub>50</sub> (14 d) > 1250 mg/kg.

**Plants:** Not determined.

**ENVIRONMENTAL EFFECTS:**

**Animals:** Metabolism in rats after oral dosing was studied using both DPX-JW062 and DPX-MP062. Most of the dose was excreted within 96 hours. Extensive metabolism to numerous minor metabolites occurs. In urine, metabolites were cleaved products (indane or

trifluoromethoxyphenyl ring products), whilst, in faeces, major metabolites retained both these moieties. Major metabolic reactions included hydroxylation of the indane ring, hydrolysis of the carboxymethyl group from the amino nitrogen, and opening of the oxadiazine ring, which gave rise to cleaved products.

**Persistence and degradability:** DT<sub>50</sub> 17 d in tama silt loam soil. Indoxacarb is considered to be moderately persistent; aerobic DT<sub>50</sub> 3-23 d, anaerobic DT<sub>50</sub> 186 d. It is considered to be immobile; K<sub>oc</sub> 3300-9600 ml/g. K<sub>d</sub> 26-95 l/kg (EU Rev. Rep.). DT<sub>50</sub> for aquatic photolysis 3.0 d (pH 5.0).

**Bio-accumulative Potential:** Not determined.

**Mobility in soil:** Not determined.

**Other adverse effects:** Indoxacarb 150 SC had little or no effect on other beneficial species.

## 13. DISPOSAL CONSIDERATIONS

**Waste:** Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. The product may be taken to a registered waste disposal site or incineration plant. Where possible, recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

**Container:** Emptied containers retain vapour and product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to one third of that of the container. Add the rinsings to the contents of the spray tank before recycling or destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dumpsite, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

## 14. TRANSPORT INFORMATION

**UN Number:** 3082

**Road Transport ADR/IRD:**

Class: 9

Packaging group: III

UN Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S (Indoxacarb 150 g/ℓ)

**Maritime Transport IMDG/IMO:**

Class: 9



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Packaging group: III  
 UN Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S (Indoxacarb 150 g/l)  
**Marine Pollutant (Y/N):** Yes, Considered a marine pollutant.  
**Air transport IATA/ICAO:**  
 Class: 9  
 Packaging group: III  
 UN Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S (Indoxacarb 150 g/l)  
**Special/Environmental Precautions: None known.**  
**Transport in bulk** (according to MARPOL 73/78, Annex II and the IBC code): Not available.

For detailed information on revisions, contact the Registration holder.

## 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation for the mixture:**  
 OSHA 1993 Regulations for Hazardous Chemical Substances.  
**Relevant information regarding restrictions:** None.  
**EU regulation:** Regulation EC1272/2008 (EU-GHS/CLP)  
**Other national regulations:** None.  
**Chemical Safety Assessment carried out?** No.

## 16. OTHER INFORMATION

**Packaging:** Packed in 1, 5, 10, 20, 25 and 50 litres plastic containers and labelled according to the South African regulations and guidelines.  
**Additional H-statement (s) (formulants)**  
**H301:** Toxic if swallowed.  
**H315:** Causes skin irritation.  
**H318:** Causes serious eye damage.  
**H400:** Very toxic to aquatic life.  
**H410:** Very toxic to aquatic life with long lasting effects.  
**H412:** Harmful to aquatic life with long-lasting effects.  
**Disclaimer:** The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

## END OF DOCUMENT

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